



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/015,583 | 12/17/2001 | William R. Lehman | T3392-000000 | 5426 |

7590 06/03/2002

Edward J. Kondracki, Esq.
MILES & STOCKBRIDGE P.C.
Suite 500
1751 Pinnacle Drive
McLean, VA 22102-3833

EXAMINER

PHAM, MINH CHAU THI

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 06/03/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015, 583

Applicant(s)

LEHMAN

Examiner

PHAM

Group Art Unit

1724

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-37 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-37 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 1724

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37).

Dastoli et al teach an air decontamination system comprising a sealed room having an inlet, a vacuum unit which creates a negative pressure within the room by suctioning air through the air inlet into the room and then from the room into an inlet of the vacuum unit wherein the vacuum unit creates a laminar flow of air within the room, and a filter unit which filters air entering the inlet of the vacuum unit.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

Art Unit: 1724

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 2, in view of Long et al (5,713,791; col. 2, lines 38-46 and lines 54-64; col. 3, lines 5-21 and lines 31-55).

Claims 2-6 call for the sealed room having a modular construction with removable walls and at least one transparent wall. Long et al disclose a clean room having a modular construction with removable walls and at least one transparent wall. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with modular construction with removable walls and at least one transparent wall as taught by Long et al to provide an effective mechanism to transport products between two separate clean room environments that would eliminate the requirements of a decontamination station for the products before they can be reintroduced into the second clean room environment.

5. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 2, in view of Renz (6,358,139; 9 in Fig. 1; col. 2, lines 21-25).

Claims 7-9 call for the an air lock room connected to the sealed room. Renz discloses an air lock room (9) connected to the sealed room wherein the air inlet extends between the sealed room and the air lock room and wherein the air suctioned through the air inlet resides within the

Art Unit: 1724

air lock room, and another air inlet which allows air to pass from the outside source into the air lock room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with an air lock room as taught by Renz so that the fresh air flowing through the filter reaches directly the sealed room and eliminates most of the contaminants from the air stream.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 2, in view of Chornenky et al (6,185,294 B1; col. 1, lines 39-45).

Claim 10 calls for an intercom system which allows a person outside to communicate with a person inside the room. Chornenky et al disclose intercom system which allows a person outside to communicate with a person inside the room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the intercom system as taught by Chornenky et al in the sealed room of Dastoli et al so that a person working inside the sealed room can communicate with others in the outside without having physically to go out of the sealed room and be contaminated.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 2, in view of Hofstra et al (5,085,134; col. 6, lines 32-42).

Claim 11 calls for a warning device which provides an indication that the sealed room is in use. Hofstra et al disclose a warning device which provides an indication that the smoker's booth

Art Unit: 1724

is in use. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with a warning device as taught by Hofstra et al so that the device would detect the presence of a user and let others know that the sealed room is in use.

8. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 2, in view of Kinkead et al (5,626,820; 14, 24, 46, 48 & 50 in Fig. 1A; col. 5, lines 15-26; col. 6, lines 9-17).

Claims 13 and 14 call for a multi-layered filtration system to remove various ranges of particle sizes and a chemical filter. Kinkead et al disclose a multi-layered filtration system of a clean room wherein the filtration system removes various ranges of particle sizes and a chemical filter. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the multi-layered filtration system as taught by Kinkead et al in the sealed room of Dastoli et al since the filtration system removes not only the particles from the air stream but also the chemical contaminants produced by the processing station.

9. Claims 15-18, 24, 27, 29 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37).

Malatesta discloses a method and apparatus of mail sorting comprising the steps of placing a piece of mail in the mail sorting machine and assembling the mail sorting. Claims 15-18, 24, 27,

Art Unit: 1724

29 and 33-37 differ from the disclosure of Malatesta in that the mail sorting station does not have a sealed room around the station. Dastoli et al disclose an air decontamination system comprising a sealed room having an inlet, a vacuum unit which creates a negative pressure within the room by suctioning air through the air inlet into the room and then from the room into an inlet of the vacuum unit wherein the vacuum unit creates a laminar flow of air within the room, and a filter unit which filters air entering the inlet of the vacuum unit. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide an air decontamination sealed room as taught by Dastoli et al around the mail sorting apparatus of Malatesta since the sealed room provides a safe and dust free environment for the postal workers to work in.

10. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 9, and further in view of Long et al (5,713,791; col. 2, lines 38-46 and lines 54-64; col. 3, lines 5-21 and lines 31-55).

Claims 19-23 call for the sealed room having a modular construction with removable walls and at least one transparent wall. Long et al disclose a clean room having a modular construction with removable walls and at least one transparent wall. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with modular construction with removable walls and at least one transparent wall as taught by Long et al to provide an effective mechanism to transport products between two

Art Unit: 1724

separate clean room environments that would eliminate the requirements of a decontamination station for the products before they can be reintroduced into the second clean room environment.

11. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 9, and further in view of Renz (6,358,139; 9 in Fig. 1; col. 2, lines 21-25).

Claims 30-32 call for the an air lock room connected to the sealed room. Renz discloses an air lock room (9) connected to the sealed room wherein the air inlet extends between the sealed room and the air lock room and wherein the air suctioned through the air inlet resides within the air lock room, and another air inlet which allows air to pass from the outside source into the air lock room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with an air lock room as taught by Renz so that the fresh air flowing through the filter reaches directly the sealed room and eliminates most of the contaminants from the air stream.

12. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 9, and further in view of Chornenky et al (6,185,294 B1; col. 1, lines 39-45).

Claim 25 calls for an intercom system which allows a person outside to communicate with a person inside the room. Chornenky et al disclose intercom system which allows a person

Art Unit: 1724

outside to communicate with a person inside the room. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the intercom system as taught by Chormenky et al in the sealed room of Dastoli et al so that a person working inside the sealed room can communicate with others in the outside without having physically to go out of the sealed room and be contaminated.

13. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 9, and further in view of Hofstra et al (5,085,134; col. 6, lines 32-42).

Claim 26 calls for a warning device which provides an indication that the sealed room is in use. Hofstra et al disclose a warning device which provides an indication that the smoker's booth is in use. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the sealed room of Dastoli et al with a warning device as taught by Hofstra et al so that the device would detect the presence of a user and let others know that the sealed room is in use.

14. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Malatesta (5,398,922; col. 8, lines 12-54), in view of Dastoli et al (4,880,581; 104, 110, 112, 114, 116 & 118 in Fig. 5; col. 7, lines 11-37), as applied supra to paragraph 9, and further in view of Kinkead et al (5,626,820; 14, 24, 46, 48 & 50 in Fig. 1A; col. 5, lines 15-26; col. 6, lines 9-17).

Art Unit: 1724

Claim 28 calls for a multi-layered filtration system to remove various ranges of particle sizes and a chemical filter. Kinkead et al disclose a multi-layered filtration system of a clean room wherein the filtration system removes various ranges of particle sizes and a chemical filter. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to adopt the multi-layered filtration system as taught by Kinkead et al in the sealed room of Dastoli et al since the filtration system removes not only the particles from the air stream but also the chemical contaminants produced by the processing station.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. .

- Thomas et al (5,083,558) disclose a mobile surgical compartment.
- Luetkemeyer (5,858,041) discloses a clean air system.
- Janus et al (6,383,241 B1) disclose a protective filtration system.
- Davis et al (4,267,769) disclose a prefabricated knockdown clean room.
- Fortney (4,304,224) discloses a positive environmental enclosure.
- Lokander et al (4,776,263) disclose a device for suspended ceiling structure.
- Suzuki et al (4,838,150) disclose a clean room.
- Strieter (Re. 33,810) discloses a portable isolation enclosure.
- Heny et al (5,730,765) disclose a glove box system.


Art Unit: 1724

- Leavey et al (5,843,196) disclose an ultra-clean transport carrier.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau Pham whose telephone number is (703) 308-1605. The examiner can normally be reached on Monday-Friday (except Wednesday) from 7:15 a.m. to 5:45 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Simmons, can be reached on (703) 308-1972. The fax phone number for this Group is (703) 872-9310 (non-finals) or (703) 872-9311 (after-finals).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.



David A. Simmons
Supervisory Patent Examiner
Technology Center 1700



MCP

May 28, 2002